

Project Profile



Client:	Department of Defence
Location:	Darwin, Northern Territory
Value:	\$3.9 million
Duration:	August 2018 to August 2020
Type	Lump Sum Design and Construct

Project Overview

Project to facilitate the design and connection of large-scale renewable energy systems to the Department of Defence's high voltage network at RAAF Base Darwin and Robertson Barracks in the Northern Territory. Works included small excavations and installation of pits and cabinets, installation of program logic circuits (PLCs), supervisory control and data acquisition (SCADA) and remote terminal unit (RTU) programming and upgrades, and testing and commissioning of the installed system.

The high voltage augmentation works included new 11kV switchgear and associated ancillaries, new 11kV cable installation, communications monitoring and control signals, PCMS systems automation augmentations, new demountable switching station and associated civil works, and high voltage metering and protection augmentations. Other works included modification of the governor control system (GCS) for Darwin and Robertson Barracks.

The project team completed more than 11,000 work hours with zero Lost Time Injuries (LTIs) and environmental incidents. Six personnel delivered the works, half of which were Indigenous, achieving 50% Indigenous participation for the project. Works were undertaken in a secure Defence facility requiring all onsite personnel to hold applicable Defence clearances. Due to the high-risk and technical nature of the works and the multiple stakeholders involved, the project team developed intricate

Solar Photovoltaic Robertson Barracks RAAF Base Darwin



commissioning procedures to ensure seamless implementation of the solar installations into the high voltage grid. Several workshops applied lessons learnt from other projects to this project, enabling a staged commissioning process that reduced the risk of interruption to base infrastructure.